

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/731,782 12/09/2003 Adel Farhan Halasa DN2003-048D02 4900 27280 7590 10/19/2004 EXAMINER THE GOODYEAR TIRE & RUBBER COMPANY PEZZUTO, HELEN LEE **INTELLECTUAL PROPERTY DEPARTMENT 823** 1144 EAST MARKET STREET ART UNIT PAPER NUMBER AKRON, OH 44316-0001 1713

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)		
		10/731,782	HALASA ET AL.	, 0.	
Office Action Summary		Examiner	Art Unit	· · · · · · · · · · · · · · · · · · ·	
		Helen L. Pezzuto	1713		
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with t	the correspondence addre	ss	
THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply within the statutory minimum of thirty (30 iii) apply and will expire SIX (6) MONTHS cause the application to become ABANT	be timely filed  )) days will be considered timely.  from the mailing date of this community (25 H S C 5 122)	unication.	
Status					
1)	Responsive to communication(s) filed on				
		-· action is non-final.			
,	closed in accordance with the practice under E	x parte Quavle, 1935 C.D. 11	, prosecution as to the me	1118 18	
Dispositi	on of Claims	,,,	,, 100 0.0. 210.		
4)⊠	Claim(s) <u>1-18</u> is/are pending in the application.				
	4a) Of the above claim(s) is/are withdraw	n from consideration			
	Claim(s) is/are allowed.	miom consideration.			
	Claim(s) <u>1-8</u> is/are rejected.				
	Claim(s) <u>9-18</u> is/are objected to.				
	Claim(s) are subject to restriction and/or	election requirement.			
	on Papers	, ,			
	The specification is objected to by the Examiner				
	The drawing(s) filed on is/are: a)☐ acce				
. • / [ ]	Applicant may not request that any objection to the d	pied of b) objected to by the rewing (a) he held in above and	ne Examiner.		
	Replacement drawing sheet(s) including the correction			15110	
11)[]	The oath or declaration is objected to by the Exa	miner Note the attached Off	ico Action or form DTO 4	121(d).	
		inilier. Note the attached Off	ice Action or form P1O-1	52.	
Priority u	nder 35 U.S.C. § 119				
	Acknowledgment is made of a claim for foreign p ☐ Allb)☐ Some * c)☐ None of:	priority under 35 U.S.C. § 119	∂(a)-(d) or (f).		
	1. Certified copies of the priority documents	have been received			
2. Certified copies of the priority documents have been received in Application No					
;	3. Copies of the certified copies of the priorit	v documents have been rece	eived in this National Star		
	application from the International Bureau	(PCT Rule 17.2(a))	wed in this National Stay	E	
* S	ee the attached detailed Office action for a list o		ived.		
		•			
Attachment(	(s)				
	of References Cited (PTO-892)	A) 🗆 1m4 - 1 - 0	(DTO 440)		
2) 🔲 Notice	of Draftsperson's Patent Drawing Review (PTO-948)	4)			
3) 🔀 Inform	ation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date 2/19/04.	5) 🔲 Notice of Informa	al Patent Application (PTO-152)		
S. Patent and Tra		6)  Other:			
TOL-326 (Re	4.4.1	on Summary	Part of Paper No./Mail Date 200	041015	

#### DETAILED ACTION

Claims 1-18 are currently pending in this application.

### Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 2/19/ is in compliance with the provisions of 37 CFR 1.97.

Accordingly, the information disclosure statement is being considered by the examiner.

#### Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

What is the scope and meaning of the recited "rubbery"? The present claims are examined with the interpretation that rubbery has the meaning of elastomeric. Applicant is herein requested to better define the term "rubbery" within the context of the pending claims.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0 693 505 A1.

EP-505 discloses an anionic polymerization process of producing vulcanizable elastomeric polymers. Prior art elastomers are prepared by anionic polymerization of diene monomers and comonomers using a functionalizing agent/initiator in the form of a reaction product or an organolithium compound and a precursor (formula III) formed by the reaction of a heterocyclic secondary amine (formula I) and diisopropenyl benzene (formula II). The resulting elastomeric polymer prepared from said initiator system contain a heterocyclic ring containing a tertiary amine as a terminal group, or if coupled, at both ends of the polymer chain. These terminal groups are taught to have affinity for the subsequent compounding with carbon black (page 6, lines 40-47; page 9, lines 37-44), thus yielding a

elastomeric product having reduced hysteresis, rolling resistance and heat build-up. Specifically, prior art terminal functionalities embrace the presently claimed functionalized monomer (a), wherein n=4,5,6. Preferred monomers such as 1,3-butadiene and styrene were exemplified, along with carbon black blending and sulfur curing of the resulting copolymer (see working examples). The instant alkali alkoxide initiator (i.e. n-butyl lithium is employed in prior art process, conducted at the instant temperature and solvent conditions. Taken the broadest interpretation of the recited "functionalized monomer", prior art elastomeric polymer can have tertiary amine functionalities at both terminal ends embraces the instant rubbery polymer. Accordingly, the examiner is of the position that in the absence of specific amounts and specific locations of the functionalized monomer recited, the instant rubbery polymer is anticipated by prior art elastomeric polymer.

## Allowable Subject Matter

6. Claims 9-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The functionalized monomers of formula (b)-(h) expressed in these dependent claims are not fairly suggested in the prior art of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen L. Pezzuto whose telephone number is (571) 272-1108. The examiner can normally be reached on 8 AM to 4 PM, Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll\_free).

Helen L. Pezzuto Primary Examiner Application/Control Number: 10/731,782

Art Unit: 1713

Art Unit 1713

Page 6

hlp